

Remarks

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the following remarks. Claims 1, 4-7, 9-21 and 24-30 remain in the application and stand rejected. Claims 2-3, 8, and 22-23 were canceled.

Rejections under 35 U.S.C. § 102

The Action rejects claims 1-3, 7, 10-13, 16-17, 20-23, 27, and 30 under 35 U.S.C. § 102(b) as allegedly being anticipated by Pino et al, “Cosimulating Synchronous DSP Applications with Analog RF Circuits,” *IEEE 1998, 0-7803-5148-7/98* (Pino).

The Examiner continues to reject a majority of the claims under 35 U.S.C. § 102. While Applicant’s representative disagrees with the analysis made by the Examiner, it is desirable to ready the present case for appeal. As a result, the claims were amended to include an element that is clearly missing from Pino.

For example, claim 1 has been amended to include “in the single simulation flow, partitioning the circuit into at least one analog partition including one or more nodes and components from the first set and at least one RF partition including one or more nodes and components from the second set with a solution of the at least one analog partition affecting a solution of the at least one RF partition and vice versa.”

This amendment is supported by original claims 2 and 3 and the specification at page 5, lines 23-25. The partitioning is a physical partition of the circuit by separating nodes and components as shown in Figure 5 of the present application and as defined in claim 1.

Applicant’s representative does not believe that Pino describes partitioning at all. However, to the extent that the Examiner believes that Pino’s “circuit envelope” analysis (Section 2.3, page 1711) is partitioning of nodes and components, it is clear from Figure 2 that the circuit envelope analysis relates to a division based on time and frequency, not based on partitioning into nodes and components as required by claim 1.

Moreover, there is nothing in Pino that describes the following limitation in claims 1: “with a solution of the at least one analog partition affecting a solution of the at least one RF partition and vice versa”.

Furthermore, the Examiner appears to argue that Pino describes partitioning at page 1713,

section 4. First, Applicant's representative believes that the roughly 100 words that makeup section 4 of Pino are not enabling of anything. And there is no description to show that solutions of analog partitions affect solutions of RF partitions and vice versa, as required by claim 1. Figure 4 of Pino only shows a high-level block diagram. The block diagram includes digital (DSP)(also shown in Figure 5) and RF (also shown in Figure 6). There is nothing that indicates that the circuit was partitioned as defined in claim 1, and nothing to indicate a solution of an analog partition affects a solution of at least one RF partition and vice versa.

As to the dependent claims, the Examiner argues that since "claims 1, 11, and 17 remain rejected, claims 2-3, 7-, 10-13, 16-20 remain rejected". (Office action, page 3, paragraph 4). Applicant's representative respectfully reminds the Examiner that just because the base claim is rejected does not mean the dependent claims are rejected. The Examiner must look at the merits of each base claim independently.

For example, claim 10 requires a very particular automatic time step adjustment, which the Examiner argues is shown by Pino paragraph 2.3 (Office action, page 6). The Examiner argues that SPICE somehow includes this limitation. Applicant's representative respectfully requests proof that SPICE uses a step H that is automatically adjusted based on simulation results of previous time steps and input stimuli, as required by claim 10. The Examiner's rejection seems to be speculating about what Spice includes.

As to claim 13, the Examiner's argument that Pino shows the limitation of using user input to partition the circuit is entirely not supported by Pino. Pino shows in figures 4-6 a top level specification of a QAM modem. There is no mention of user input.

Amended claim 17 includes "means for, in a single simulation flow, partitioning the circuit into at least one analog partition including one or more nodes and components from the first set and at least one RF partition including one or more nodes and components from the second set with a solution of the at least one analog partition affecting a solution of the at least one RF partition and vice versa." As argued above, the Examiner has not shown that Pino's cryptic drawings of Figures 4-6 and the roughly 100 word description of section 4 (Pino page 1713) has sufficient information to disclose that solutions of analog partitions affect solutions of RF partitions and vice versa.

Claim 21 includes limitations similar to claim 17, and should be in condition for allowance for the reasons stated above.

The remaining claims are dependent claims and should be in condition for allowance for the reasons stated above. Nonetheless, Applicant's representative respectfully requests that the Examiner separately analyze each dependent claim.

Rejections under 35 U.S.C. § 103

The Action rejects claims 4-6, 14-15, 19, and 24-26 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Pino, and further in view of Li et al., "A Frequency Relaxation Approach for Analog/RF System-Level Simulation," *ACM 2004*, 1-58113-828-8/04/0006 (Li).

Regarding claim 4, it is unclear how Li's discussion of a relaxation method (Page 846, col. 2, section 4.1) discloses the requirements of claim 4. More particularly, claim 4 requires allowing the user to control partitioning of the circuit. Li does not seem to disclose this limitation and the paragraphs that the Examiner cites makes no mention of user control of partitioning. Indeed, Li seems to be a fully automated solution that does not allow user input.

As to claim 5, the Examiner appears to be speculating about what Li discloses. The Examiner is required to point to a specific feature in Li that maps to the claimed feature. There is nothing the Examiner cites that discusses user input or sub-partitioning. The Examiner appears to argue that some sort of "suggestion" is adequate for a claim rejection, but Applicant would appreciate if the Examiner point to something specific in Li that teaches claim 5 of the present application.

The remaining claims are all dependent claims and should be in condition for allowance for the reasons stated above.

Interview Request

If the claims are not found by the Examiner to be allowable, the Examiner is formally requested to call the undersigned attorney to set up an interview to discuss this application. This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

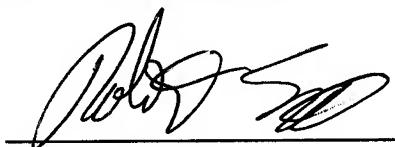
Conclusion

The claims in their present form should be allowable. Such action is respectfully requested.

Respectfully submitted,

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